What Is Claimed Is:

1. A liquid crystal display device, comprising:

a plurality of gate lines and data lines crossing each other to define a plurality of pixel regions;

a plurality of thin film transistors, each disposed in one of the pixel regions; and

a plurality of pixel electrodes, each disposed in one of the pixel regions,

wherein the thin film transistors include at least one Ti layer.

2. The device according to claim 1, wherein the thin film transistor includes:

a gate electrode on a first substrate;

a gate insulating layer over the first substrate;

a semiconductor layer on the gate insulating layer;

source/drain electrodes on the semiconductor layer; and

a passivation layer over the first substrate including the source/drain electrodes.

3. The device according to claim 2, further comprising a TiO_2 layer formed on at least the passivation layer.

4. The device according to claim 3, wherein a surface of the TiO_2 layer has hydrophilic properties.

5. The device according to claim 2, wherein the Ti layer is formed on at least one of the gate electrode, the semiconductor layer, and the source/drain electrodes.

6. The device according to claim 5, wherein the Ti layer is formed on the semiconductor layer to function as an ohmic contact layer.

7. The device according to claim 1, further comprising:

a black matrix on a second substrate;

a color filter layer on the second substrate; and

a liquid crystal material layer between the first and second substrates.

8. The device according to claim 1, further comprising a TiO_2 layer formed on at least each of the pixel electrodes.

9. The device according to claim 8, wherein a surface of the TiO_2 layer has hydrophilic properties.

10. The device according to claim 1, further comprising at least one TiO_2 layer formed in the thin film transistors.

11. The device according to claim 10, wherein a surface of the TiO_2 layer has hydrophilic properties.

12. A liquid crystal display device, comprising:

a plurality of gate lines and data lines crossing each other to define a plurality of pixel regions;

a thin film transistor in each pixel region;

a pixel electrode in each pixel region; and

a metal masking layer in the thin film transistor.

13. The device according to claim 12, wherein the metal masking layer includes Ti.

14. The device according to claim 12, wherein the metal masking layer includes a Ti layer, and a TiO_2 layer having a hydrophilic surface.

15. A method of fabricating a liquid crystal display device, comprising:

providing a first substrate;

forming a gate electrode on a first substrate;

forming a gate insulating layer on an entire surface of the first substrate including the gate electrode;

forming a semiconductor layer on the gate insulating layer;

forming source/drain electrodes on the semiconductor layer;

forming a passivation layer on the gate insulating layer and the source/drain electrodes; and

forming a pixel electrode on the passivation layer,

wherein at least one of the gate electrode, semiconductor layer, source/drain electrodes, and pixel electrode is formed using a Ti layer and a TiN layer.

16. The method according to claim 15, wherein the forming a gate electrode comprises:

forming a metal layer on the first substrate;

forming the Ti layer on the metal layer;

irradiating light onto a portion of the Ti layer using a mask to convert the exposed portion of the Ti layer into the TiN layer;

removing the TiN layer;

etching the metal layer using the Ti layer as a mask; and

removing the Ti layer.

17. The method according to claim 16, wherein the TiN layer is removed using an etching gas.

18. The method according to claim 16, wherein the Ti layer is removed using an etching solution.

19. The method according to claim 16, wherein the Ti layer is removed using an etching gas.

20. The method according to claim 15, wherein the forming a semiconductor layer comprises:

depositing the semiconductor layer on the gate insulating layer;

forming the Ti layer on the semiconductor layer;

irradiating light onto a portion of the Ti layer using a mask to convert the exposed portions of the Ti layer into a TiN layer;

removing the TiN layer;

etching the semiconductor layer using the Ti layer as a mask; and

removing the Ti layer.

21. The method according to claim 20, wherein the TiN layer is removed using an etching gas.

22. The method according to claim 20, wherein the Ti layer is removed using an etching solution.

23. The method according to claim 20, wherein the Ti layer is removed using an etching gas.

24. The method according to claim 15, wherein the forming source/drain electrodes comprises:

forming a metal layer on the semiconductor layer;

forming the Ti layer on the metal layer;

irradiating light onto a portion of the Ti layer using a mask to convert the exposed portion of the Ti layer into a TiN layer;

removing the TiN layer;

etching the metal layer using the Ti layer as a mask; and

removing the Ti layer.

25. The method according to claim 24, wherein the TiN layer is removed using an etching gas.

26. The method according to claim 24, wherein the Ti layer is removed using an etching solution.

27. The method according to claim 24, wherein the Ti layer is removed using an etching gas.

28. The method according to claim 15, wherein the forming of a pixel electrode comprises:

forming an indium tin oxide layer on the passivation layer;

forming the Ti layer on the indium tin oxide layer;

irradiating light onto a portion of the Ti layer using a mask to convert the exposed portion of the Ti layer into a TiN layer;

removing the TiN layer;

etching the indium tin oxide layer using the Ti layer as a mask; and

removing the Ti layer.

29. The method according to claim 28, wherein the TiN layer is removed using an etching gas.

30. The method according to claim 28, wherein the Ti layer is removed using an etching solution.

31. The method according to claim 28, wherein the Ti layer is removed using an etching gas.

32. The method according to claim 15, further comprising forming a contact hole in the passivation layer to electrically interconnect the pixel electrode to the drain electrode.

33. The method according to claim 32, wherein the forming of a contact hole comprises:

forming a Ti layer on the passivation layer;

irradiating light onto a portion of the Ti layer using a mask to convert the exposed portion of the Ti layer into a TiN layer;

removing the TiN layer;

etching the passivation layer using the Ti layer as a mask; and

removing the Ti layer.

34. The method according to claim 33, wherein the TiN layer is removed using an etching gas.

35. The method according to claim 33, wherein the Ti layer is removed using an etching solution.

36. The method according to claim 33, wherein the Ti layer is removed using an etching gas.

37. The method according to claim 15, further comprising:

forming a black matrix and a color filter layer on a second substrate;

bonding the first and second substrates together; and

forming a liquid crystal material layer between the bonded first and second substrates.

38. A method of fabricating a liquid crystal display device, comprising:

forming a gate electrode on a first substrate;

forming a gate insulating layer on an entire surface of the first substrate;

forming a semiconductor layer on the gate insulating layer;

forming source/drain electrodes on the semiconductor layer;

forming a passivation layer on the source/drain electrodes; and

forming a pixel electrode on the passivation layer,

wherein at least one of the gate electrode, semiconductor layer, source/drain electrodes, and pixel electrode is formed using a Ti masking layer and Ti pattern.

39. The method according to claim 38, wherein the forming a gate electrode comprises:

forming a metal layer on the first substrate;

forming the Ti masking layer on the metal layer;

irradiating light onto a portion of the Ti masking layer using a mask to convert the exposed portion of the Ti masking layer into a TiN layer;

removing the TiN layer to form the first Ti pattern; and

etching the metal layer using the first Ti pattern as a mask to form the gate electrode and the first Ti pattern.

40. The method according to claim 39, wherein the TiN layer is removed using an etching gas.

41. The method according to claim 38, wherein the forming of a semiconductor layer comprises:

forming the semiconductor layer on the gate insulating layer;

forming a Ti masking layer on the semiconductor layer;

irradiating light onto a portion of the Ti masking layer using a mask to convert the Ti masking layer into a TiN layer;

removing the TiN layer to form the Ti pattern; and

etching the semiconductor layer using the Ti pattern as a mask to form the semiconductor layer and the Ti pattern.

42. The method according to claim 41, wherein the TiN layer is removed using an etching gas.

43. The method according to claim 38, wherein the forming of source/drain electrodes comprises:

forming a metal layer on the semiconductor layer;

forming the Ti masking layer on the metal layer;

irradiating light onto a portion of the Ti masking layer using a mask to convert the exposed region of the Ti masking layer into a TiN layer;

removing the TiN layer to form the Ti pattern; and

etching the metal layer using the Ti pattern as a mask to form the source/drain electrodes and the Ti pattern.

44. The method according to claim 43, wherein the TiN layer is removed using an etching gas.

45. The method according to claim 38, wherein the forming of a pixel electrode comprises:

forming an indium tin oxide layer on the passivation layer;

forming the Ti masking layer on the indium tin oxide layer;

irradiating light onto a portion of the Ti masking layer using a mask to convert the exposed portion of the Ti masking layer into a TiN layer;

removing the TiN layer to form the Ti pattern layer;

etching the semiconductor layer using the Ti pattern layer as a mask; and

removing the Ti pattern layer.

46. The method according to claim 45, wherein the TiN layer is removed using an etching gas.

47. The method according to claim 45, wherein the Ti pattern layer is removed using an etching solution.

48. The method according to claim 45, wherein the Ti pattern layer is removed using an etching gas.

49. The method according to claim 38, further comprising forming a contact hole in the passivation layer to connect the pixel electrode to the drain electrode.

50. The method according to claim 49, wherein the forming a contact hole comprises:

forming a Ti masking layer on the passivation layer;

irradiating light onto a portion of the Ti masking layer using a mask to convert the exposed portion of the Ti masking layer into a TiN layer;

removing the TiN layer to form a second Ti pattern layer; and

etching the semiconductor layer using the second Ti pattern layer as a mask; and

removing the second Ti pattern layer.

51. The method according to claim 50, wherein the TiN layer is removed using an etching gas.

52. The method according to claim 50, wherein the second Ti pattern layer is removed using an etching solution.

53. The method according to claim 50, wherein the second Ti pattern layer is removed using an etching gas.

54. The method according to claim 38, wherein the forming a pixel electrode comprises:

forming an indium tin oxide layer on the passivation layer;

forming a hydrophobic TiO_2 layer on the indium tin oxide layer;

irradiating light onto a portion of the hydrophobic TiO_2 layer using a mask to convert the exposed portion of the hydrophobic TiO_2 layer into a hydrophilic layer;

etching the hydrophobic TiO_2 layer to form a TiO_2 pattern having hydrophilic properties; and

etching the indium tin oxide layer using the TiO_2 pattern to form the pixel electrode and a hydrophilic TiO_2 pattern layer.

55. The method according to claim 54, wherein the hydrophobic TiO_2 layer is etched using an etching solution including H_2SO_4.

56. The method according to claim 54, wherein the hydrophobic TiO_2 layer is etched using an alkali based etching solution.

57. The method according to claim 38, further comprising forming a contact hole in the passivation layer to expose the drain electrode.

58. The method according to claim 57, wherein the forming a contact hole comprises:

forming a hydrophilic TiO_2 layer on the passivation layer;

irradiating light onto the hydrophilic TiO_2 layer using a mask to form a hydrophobic TiO_2 layer;

etching the hydrophobic TiO_2 layer to form a first hydrophilic TiO_2 pattern layer; and

etching the passivation layer using the first hydrophilic TiO_2 pattern layer to form the contact hole and a second hydrophilic TiO_2 pattern layer.

59. The method according to claim 58, wherein the hydrophobic TiO_2 layer is etched using an etching solution including H_2SO_4.

60. The method according to claim 58, wherein the hydrophobic TiO_2 layer is etched using an alkali based etching solution.

61. A patterning method, comprising:

forming an etching subject layer on a substrate;

forming a Ti layer on the etching subject layer;

irradiating light onto the Ti layer using a mask to form a TiN layer;

etching the TiN layer to form a Ti pattern layer;

etching the etching subject layer using the Ti pattern layer; and

removing the Ti pattern layer.

62. The method according to claim 61, wherein the light includes at least one of ultraviolet light and laser light.

63. The method according to claim 61, wherein the TiN layer is formed by converting the irradiated Ti layer in a nitrogen atmosphere.

64. The method according to claim 61, wherein the etching of the TiN layer comprises applying an etching gas to the TiN layer.

65. The method according to claim 64, wherein the etching gas includes one of Cl_2 and a Cl_2 mixed gas.

66. The method according to claim 61, wherein the removing of the Ti pattern layer comprises applying an etching solution including an acid to the Ti pattern layer.

67. The method according to claim 66, wherein the acid includes HF.

68. The method according to claim 61, wherein the removing of the Ti pattern layer comprises applying an etching gas to the Ti pattern layer.

69. The method according to claim 68, wherein the etching gas includes one of Cl_2 and a Cl_2 mixed gas.

70. The method according to claim 61, wherein the etching subject layer includes at least one of a metal layer, an insulating layer, and a semiconductor layer.